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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/505,405

01/13/2006

Stewart Cole

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22852

7590

10/07/2009

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP

901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

BABIC, CHRISTOPHER M

ART UNIT

PAPER NUMBER

1637

MAIL DATE

DELIVERY MODE

10/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/505,405	Applicant(s) COLE ET AL.	
	Examiner CHRISTOPHER M. BABIC	Art Unit 1637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5,7,8,10-13 and 15-62 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 and 23-59 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 7 is/are allowed.
- 6) ☒ Claim(s) 5,8,10,19-22 and 60-62 is/are rejected.
- 7) ☒ Claim(s) 11-13,19-22 and 60 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 14, 2009 has been entered. Claim(s) 1, 5, 7, 8, 10-13, and 15-62 are pending. Claim(s) 1, 5, 7, 8, 10-13, 19-22, and 60-62 are under examination.

Claim Objections

Claims 11-13, 19-22, and 60 are objected to because of the following informalities:

Claims 11-13 depend from a cancelled claim. Therefore claims 11-13, 19-22, and 60 cannot be further treated on the merits.

Appropriate correction is required.

Claim Rejections - 35 USC § 112 - Indefiniteness

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 19-22, and 60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The metes and bounds of claim 8 are unclear. Claim 7 as amended encompasses only the full length sequence recited in SEQ ID NO: 4 or the full length complement thereof. Claim 8 recites a fragment of at least 8-2000 consecutive nucleotides of the nucleic acid according to claim 7. Thus, claim 8 dramatically increases the number of species relative to that of claim 7.

Claim Rejections - 35 USC § 102

The indicated allowability of claims 10 and 61 is withdrawn in view of a newly discovered reference(s). Rejections based on the newly cited reference(s) follow.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Brennan (U.S. 5,474,796).

With regard to claim 8, Brennan teaches the production of a solid support comprising immobilized extendable oligonucleotides that represent every possible permutation of the 10-mer oligonucleotide (col. 9, example 4, for example). Thus, the product of Brennan inherently contains oligonucleotides that possess 100% identity or homology to 10-mer segments of SEQ ID NO: 1 and 4 as well as oligonucleotides that are perfectly complementary to 10-mer segments of SEQ ID NO: 1 and 4. Thus, Brennan anticipates the claimed invention.

With regard to claims 5, the fragment obtained by amplification with primers, SEQ ID NO: 13-18, necessarily comprises a 10-mer that was present in the product according to Brennan. For example, the 20-mer recited in SEQ ID NO: 13 necessarily comprises a 10-mer that was present in the product according to Brennan.

2. Claims 5, 8, 10, 61, and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Fodor et al. (U.S. 2001/0053519 A1).

Fodor teaches the production of solid supports comprising a set of every permutation (4^n) of different length oligonucleotides or n-mers ([0100]-[0104], teaches the production of a 2-mer, 10-mer and 25-mer array; col. 26, claims 1 and 7 encompass a range of arrays, 10-mer to 25-mer arrays, for example). This product comprised every possible primer of 20 bases in length, and therefore inherently comprised SEQ ID NOs: 13-18.

Allowable Subject Matter

With regard to claims 1 and 7, a search of the prior art revealed no reference teaching or fairly suggesting the oligonucleotide sequences recited in SEQ ID NOs: 1 and 4.

Conclusion

Claims 1 and 7 are allowed.

Claims 11-13, 19-22, and 60 are objected to.

Claims 5, 8, 10, 19-22, and 60-62 are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Babic whose telephone number is 814-880-9945. The examiner can normally be reached on Monday-Friday 10:00AM to 6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1637

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher M. Babic/
Primary Examiner
Art Unit 1637
Technology Center 1600